CONTENTS

| (Abstracts/contents lists published in: Chem. Abstr.; Curr. Contents; Phys. Chem. Earth Sci., Li | fe Sci.) |
|--|-----------|
| Assessment of the values of the C-H stretching force constants in sugar molecules | |
| S. Pizzini, G. Bajo, S. Abbate (Milan, Italy), G. Conti(Novara, Italy), and R. F. | 1 |
| | 1. |
| ATALLA (Appleton, WI, U.S.A.) | |
| Furanose-ring anomerization: a kinetic study of the 5-deoxypentoses and 5-O-methylpentoses | |
| J. R. SNYDER AND A. S. SERIANNI (Notre Dame, IN, U.S.A.) | 13 |
| Structural analysis by fast-atom-bombardment mass spectrometry of the mixture of aldito | c |
| derived from the O-linked oligosaccharides of murine glycophorins | 13 |
| H. KROTKIEWSKI, E. LISOWSKA (Wrocław, Poland), AS. ANGEL, AND B. NILSSON (Lunc | I. |
| Sweden) | 27 |
| | |
| Long-range carbon-proton coupling constants: application to conformational studies of oligonal saccharides |)- |
| B. MULLOY (Potters Bar, Gt. Britain), T. A. FRENKIEL, AND D. B. DAVIES (London, G | t. |
| Britain) | |
| | £ |
| The determination of complex carbohydrate structure by using carbonyl carbon resonances of peracetylated derivatives | I |
| W. J. Goux (Richardson, TX, U.S.A.) | 47 |
| | |
| Reaction of 2-amino-2-deoxy-D-glucose and lysine: isolation and characterization of 2,5-bis(tetra | ı- |
| hydroxybutyl)pyrazine | |
| G. CANDIANO, G. M. GHIGGERI, R. GUSMANO (Genova, Italy), L. ZETTA, E. BENFENAT | |
| AND G. ICARDI (Milan, Italy) | 67 |
| Synthesis of uridine 5'-(2-acetamido-2,4-dideoxy-4-fluoro-α-D-galactopyranosyl) diphosphate an | d |
| uridine 5'-(2-acetamido-2,6-dideoxy-6-fluoro-α-D-glucopyranosyl) diphosphate | |
| R. L. THOMAS, S. A. ABBAS, AND K. L. MATTA (Buffalo, NY, U.S.A.) | 77 |
| | |
| Systematic chemical synthesis and n.m.r. spectra of methyl α -glycosides of isomalto-oligosaccharides and related compounds | • |
| P. Kováč and L. Lerner (Bethesda, MD, U.S.A.) | 87 |
| | |
| Malto-oligosaccharide homologues of 3,7-anhydro-2-azi-1,2-dideoxy-D-glycero-D-gulo-octitol: im | |
| proved photoaffinity reagents for labelling the malto-oligosaccharide-binding protein of | f |
| Escherichia coli | |
| J. LEHMANN, J. STECK, W. WEISER (Freiburg, F.R.G.), W. BOOS, AND S. WRISSENBERG (Konstanz, F.R.G.) | 113 |
| (Rollstaliz, F.R.O.) | 113 |
| Stereochemical studies of the synthesis of α -aminonitriles related to lincosamine | |
| S. CZERNECKI AND JM. VALERY (Paris, France) | 121 |
| The formation of 2-hydroxy-2-cyclopenten-1-ones from polysaccharides during kraft pulping o | f |
| pine wood | 1 |
| | 121 |
| K. Niemelä (Espoo, Finland) | 131 |
| Sequential enzymic hydrolysis of potentially aromatic glycosides from grape | |
| Z. GUNATA, S. BITTEUR, JM. BRILLOUET, C. BAYONOVE, AND R. CORDONNIER | t |
| (Montpellier, France) | 139 |
| (C | orleaf) |
| (Continued ov | erieuj) |

| Carbohydrate components for modified anthracyclines: synthesis of derivatives of 3-amino-3,4,6-trideoxy-L-lyxo- and -L-xylo-hexose, and attempts at fluorination of C-2 H. H. BAER AND F. HERNÁNDEZ MATEO (Ottawa, Ontario, Canada) | 151 |
|---|-----|
| Kinetics and mechanism of the acid-catalysed butanolysis of 1,6-anhydro-β-D-glucopyranose A. J. J. Straathof, J. M. Vrolijk, H. van Bekkum, and A. P. G. Kieboom (Delft, The | |
| Netherlands) | 163 |
| Novel structure of the cellular mannan of the pathogenic yeast Candida krusei G. Kogan, V. Pavliak, J. Šandula, and L. Masler (Bratislava, Czechoslovakia) | 171 |
| Determination of the degree of esterification and the distribution of methylated and free carboxyl groups in pectins by ¹ H-n.m.r. spectroscopy | |
| H. GRASDALEN, O. E. BAKØY, AND B. LARSEN (Trondheim, Norway) | 183 |
| A re-investigation of the phosphorylation of dextran with polyphosphoric acid: evidence for the formation of different types of phosphate moieties | |
| D. SACCO, D. KLETT-ZYGMUNT, AND E. DELLACHERIE (Nancy, France) | 193 |
| Enzymic hydrolysis of rhizobial 4-O-methyl-D-glucurono-L-rhamnan | |
| M. C. CADMUS, L. K. JACKSON, W. M. RUTHERFORD, D. WEISLEDER, AND M. E. SLODKI | 202 |
| (Peoria, IL, U.S.A.) | 203 |
| Stimulation of pea 1,4-β-glucanase activity by oligosaccharides derived from xyloglucan V. Farkas and G. Maclachlan (Montréal, Québec, Canada) | 213 |
| Stereoselective syntheses of C-(D-glucopyranosyl)alkenes D. HORTON AND T. MIYAKE (Columbus, OH, U.S.A.) | 221 |
| Notes | |
| Preparative procedures for conversion of daunorubicin into doxorubicin (Adriamycin) and 14-O-acetyldoxorubicin by way of 14-bromodaunorubicin | |
| D. HORTON, W. PRIEBE, AND M. SZNAIDMAN (Columbus, OH, U.S.A.) | 231 |
| Complex formation between guar D-galacto-D-mannan and borate ion. Thermodynamic data O. Noble and F. R. Taravel (Saint Martin d'Hères, France) | 236 |
| Effects of methyl, ethyl, and carboxymethyl O-substitution on the anomeric equilibrium of D-glucopyranose | |
| J. REUBEN (Wilmington, DE, U.S.A.) | 244 |
| X-Ray structure of 3,4,5-tri-O-acetyl-2,6-anhydro-D-mannononitrile (2,3,4-tri-O-acetyl-α-D-arabinopyranosyl cyanide) | |
| P. KÖLL, G. PAPERT, W. SAAK, AND S. POHL (Oldenburg, F.R.G.) | 247 |
| An improved preparation of 5'-deoxyadenosine by coupling methods L. M. Lerner (Brooklyn, NY, U.S.A.) | 250 |
| Synthesis of the H-disaccharide (2-O-α-L-fucopyranosyl-D-galactose) via the trichloroacetimidate method | |
| B. WEGMANN AND R. R. SCHMIDT (Konstanz, F.R.G.) | 254 |
| Nucleophilic displacement reactions of some N -acetyl- N - p -chlorophenyl- β -D-ribopyranosylamine derivatives | |
| Z. SMIATACZ (Gdańsk, Poland) AND A. MOCZULSKA (Slupsk, Poland) | 262 |

| Preparation of ¹⁴ C-labelled (1→3)-β-D-gluco-oligosaccharides by transglycosylation P. W. Bezukladnikov and L. A. Elyakova (Vladivostok, U.S.S.R.) | 268 |
|---|-----|
| Synthesis of (1S,3R,4R,5R)-3,4-(isopropylidenedioxy)-1-[(1R)-1,2-(isopropylidenedioxy)ethyl]-2-oxaspiro[4.4]non-6-en-8-one from D-glucose | |
| K. TADANO, S. KANAZAWA, H. YAMADA, AND S. OGAWA (Yokohama, Japan) | 271 |
| 6-Deoxy-6-(dimethylphenylsilyl)-1,2:3,4-di-O-isopropylidene-β-L-altropyranose: synthesis via hydrosilation and reactivity | |
| J. J. PEGRAM AND C. B. ANDERSON (Santa Barbara, CA, U.S.A.) | 276 |
| The pneumococcal polysaccharide S4: a structural re-assessment | |
| C. JONES AND F. CURRIE (Potters Bar, Gt. Britain) | 279 |
| A $(1\rightarrow3,4)$ -linked β -D-glucan from the cell walls of regenerating tobacco protoplasts | |
| A. HENSEL AND G. FRANZ (Regensburg, F.R.G.) | 285 |
| The structure of the Streptococcus pneumoniae type 29 polysaccharide: a re-examination | |
| L. Kenne and B. Lindberg (Stockholm, Sweden) | 288 |
| Maintenance of heparan sulfate structure throughout evolution: Chemical and enzymic degrada- | |
| tion, and ¹³ C-n.m.rspectral evidence H. B. Nader, T. M. P. C. Ferreira, L. Toma, S. F. Chavante, C. P. Dietrich, B. | |
| CASU, AND G. TORRI (Milan, Italy) | 292 |
| Prolimin any communications | |
| Preliminary communications | |
| A facile regio- and stereo-selective synthesis of α -glycosides of N -acetylneuraminic acid | |
| T. Murase, H. Ishida, M. Kiso, and A. Hasegawa (Gifu, Japan) | c1 |
| Pyruvic acetal formation from a pyruvyl thioacetal, catalyzed by methyl triflate, dimethyl(methyl- | |
| thio)sulfonium triflate, or nitroso tetrafluoroborate | ~5 |
| A. LIPTÁK AND L. SZABÓ (Debrecen, Hungary) | c5 |
| Book review | с9 |
| Author index | c11 |
| Subject index | c13 |
| | |